

RAILWAY JOTTINGS.

THE opinion of one of the Queen's counsel on the law of liability is embodied in the answers to the following questions:—"Are the original subscribers who have lately sold their scrip still liable to unsatisfied creditors?" Answer: "They are."—"Are they liable for such further call as may be made?" Answer: "This depends upon whether the directors and other subscribers have accepted the purchasers in their place, and so released them."—"Will the Court of Chancery compel the purchasers to indemnify the sellers against their liability to creditors and for calls?" Answer: "It will not, unless there were special agreements to that effect."—"The Joint Stock Company Regulation Act, 7 & 8 Vict., c. 110, sec. 26, prohibiting the sale of shares before complete registration—are not such sales, the company being only provisionally registered, illegal? If not, are they not illegal on other grounds?" Answer: "It has been determined that the above section does not apply to railway companies. The circumstance, therefore, of the company being only provisionally registered is immaterial. The sale of railway scrip does not appear to be illegal, notwithstanding there are some dicta in the books favourable to such a transaction. But though the sale be not illegal, yet it will be seen from my answers to the other questions that the result of it is different from what probably most original subscribers have anticipated. A sale of railway scrip in the way usual in the city merely creates the relation of trustee and *cestui que* trust between the original subscriber and purchaser, and by no means relieves the former from responsibility as regards other persons."—"A case of railway jobbing by 'a great personage,' in a transaction connected with one of the Lincolnshire lines of railway has just been partially exposed by the *Samford Mercury*. A piece of land estimated at 20l. an acre, and assessed in all by the company's surveyor at 100l., has formed the ostensible ground for a demand of 30,000l., or 500l. an acre. These conditions not being complied with, the great personage became hostile to the line, and the third reading in the Lords has been postponed on the alleged ground that the Bill has not the favour of the proprietors and population on the line, and is moreover in some way inconsistent with the Earl of Dalhousie's rules."—"The London and Birmingham Company are said to have unavailingly offered 4,000l. a year for permission to cross the Blackwall line with their East and West India Dock scheme. A rumour has, probably in consequence of this offer, arisen to the effect that the London and Birmingham, the Eastern Counties, and the Eastern Union, are competitors for the purchase of the Blackwall line."—"A number of houses, mostly new, are about to be cleared away for the extension metropolitan viaduct of the London and South-Western line, from the terminus at Nine Elms to the intended station near the Hungerford Suspension Bridge."—"A train of nine carriages, with passengers and a luggage van, is said to have been drawn by 'The Stratford' narrow gauge engine, from Bromsgrove to Gloucester at an average speed of fifty-eight miles an hour; the velocity often amounting to sixty-three miles an hour."—"Mr. Stephenson has been experimenting extensively and successfully with an iron model of his intended tunnel across the Menai Straits. The model is 20 feet long and 4 feet high."—"The Admiralty have finally settled the terms on which the Grand Junction Company are to be allowed to carry their line across the Mersey at Runcorn. As conservators of the river, they require that the bridge, if built on arches, shall have waterway openings of 280 feet in the clear, and a clear headway of 100 feet under the centre of the arches; but if flat girders should be substituted for arches, 250 feet clear between the piers will be sufficient. A turret staircase is to be erected to facilitate the warping of large vessels through the bridge, and other works are specified, amongst which are the removal of the island between the Castle Rock and the Old Quay Canal, and of a large portion of the rocky shore on the Lancaster side, and part of the Castle Rock on the Cheshire side; with the erection of a curved wall or weir for 2,000 feet eastward, and, if necessary, 800 feet further, in order to

give a proper direction to the tidal streams.—Mr. Walker's Report on the crossing of the Tamar by a bridge or a ferry has been printed by the Commons. As to the bridge, he recommends that it consist of four arches, all of the same size, having 95 feet elevation in the middle openings and 92 feet in the side openings at the high water of neap tides. This will thus provide 100 feet in the centre, and 108 feet at half flood; and "although the bridge," says Mr. Walker, "will not, by these means, be perfectly harmless to the navigation, it will be nearly unobjectionable, provided the railway object be considered for the public good."—"The last arch of the Docker Viaduct, on the Lancaster and Carlisle line, has been keyed."—"The two heaviest contracts on the Carlisle, Dumfries, and Glasgow line, between Kilmarnock and Cumnock, are in active progress. They consist of the tunnel through the Skeoch hill or Mossiel ridge, and the great bridge on the water of Ayr. The tunnel, which is contracted for by Mr. Campbell, of Irvine, is 666 yards long, mostly hard whin-stone. At the summit of the hill it will be 160 feet below the surface. It lies about a quarter of a mile west of Mossiel, once the residence of Robert Burns. The bridge, which is contracted for by Messrs. Ross and Mitchell, of Edinburgh, passes over the Ayr about a quarter of a mile east of King'scleugh, once the residence of the King of the Cleugh, and near the braes of Ballochmyle. The land on both sides of the river in this classical vicinity, stands about 100 feet below the level of the line, to the rock head, beginning about an eighth of a mile back. The sub-contractors for the banks are Sutherland and Guo. The great arch of the bridge is 185 feet in span, and 190 from the bed of the river to the level of the rails, with a viaduct of three large arches at each end. When finished it is said it will be the greatest mass of arched masonry yet known. Nearly 10,000l. worth of timber, mostly American fir, is already used in the uprights, cranes, and combs; and a large quantity is yet wanting to finish the uprights."—"The English mails now reach Edinburgh by the North British Line nearly four hours earlier than before. The time distance between London and Edinburgh is thus already reduced to twenty-three hours, and when the railway communication is unbroken and complete, it will be only fifteen."—"Nearly all the cuttings on the Great Southern and Western Irish Railway, to within a few hundred yards of the Carlow terminus, are completed. The bridge across the Dublin-road is a singular work of art. The abutments to two of the opposite acute angles are forty-three degrees, and consequently forty-seven degrees from the right angle or square. The formation of this singularly oblique arch commenced at these opposite angles, and continues on in spiral courses until they meet, when the last spiral courses will form the keystones of the whole arch. The line, it is said, will most probably be opened about the middle of the present month."—"The establishment of a low uniform charge for parcels on railway lines in general is much wanted, and without the slightest doubt would be a source of increased revenue to railway proprietors themselves."

TELEGRAPHIC PROGRESS.

The telegraph on the Colchester line of the Eastern Counties Railway has been commenced, that on the Cambridge line having been found most effective. It is to be on the same principle as the other, which it will join at the junction of the two lines at Stratford. Arrangements are in progress by the Grand Junction for the completion of the telegraph from Manchester to Liverpool, and from Liverpool through the intermediate stations to London. Contracts are about to be entered into.—It has been lately proposed to employ the electricity of the telegraph occasionally to a new purpose, namely, to the resuscitation of the apparently drowned, and of those in apoplectic fits. Dr. Bodin, of Paris, has by recent trials of galvanism restored persons pronounced by the most intelligent medical men perfectly dead; all previous attempts at resuscitation by warmth, friction, carbonate of ammonia, &c., proving ineffectual.—The Grand Duke of Tuscany, has ordered the establishment of electric telegraphs through his estates.—

On the line of telegraph between New York and Baltimore, a singular freak of the lightning is said to have displayed itself to the wondering eyes of these acute observers, the Americans. "Three thunder storms," says the *New York Sun*, June 8th, "each thirty to sixty miles apart, were all coming east on the telegraph route about the same time, and every discharge of electricity from either was fully recorded by the lightning itself in the telegraph office at Jersey City, Philadelphia, Wilmington, or Baltimore. The wire became altogether unmanageable, and the visitor from the clouds had the field to itself. The letters of Morse's telegraphic alphabet which this natural lightning seemed to be most partial to, were L and T [a curt abbreviation for lightning itself, no doubt], but occasionally it went at the numerals, and dashed off 1's, 5's, 50's, 500's, 5,000's, in its own rapid style. We learn that when two or more thunder clouds get into the same vicinity, and discharge their electricity at each other, or receive the fluid from the earth and return it again, or when ground lightning prevails, the effect on the telegraph wires is to produce a strange and original language, which may yet be made intelligible. In fact, each kind of lightning (what! greased lightning also?) speaks for itself, and writes what it says."—"At the British and Foreign Institute lately, a model was exhibited, in action, of a new electric telegraph, of a kind very similar, we remember, to an 'American' invention for reporting speeches, long since announced, but treated with the usual incredulity which such inventions have perhaps too often and too indiscriminately met with. By the present invention, 'any one writing, by the pressure of ivory keys exactly like those of a pianoforte, each representing a letter or figure, can transmit by means of a single extended wire, to any distance, 600 miles or 5,000 miles, an almost instantaneous message in words that are printed, by a correspondent machine at the other end of the line, as fast as the sentence is spoken.'—"A new species of electric current, we may here observe, is said to have been recently discovered by a Dr. S. B. Smith, who has invented an electro magnetic machine, which he calls the torpedo, since it gives off electricity when touched at any part, and acts also with more force than the usual instruments."

ARE ARCHITECTS ONLY TO COPY?

SIR,—In your last number, I observe an extract from "Studies of Ancient Domestic Architecture," headed, "Are Architects only to Copy?" Now I most cordially sympathize with the author, in his lamentation over the present worn-out state of architecture as a Fine Art; yet I would submit it to your judgment, whether the general tone of that extract is calculated to aid in its revival. That architecture has been in a debased state for a long time previous to the late signs of amendment, I think no one will be found to deny; but in this condition, what can we do better than copy, until we regain our former position. It may be humiliating, but can any one who has lost character and reputation, raise himself in a surer or more honourable way, than by humbly retracing his steps? To disdain copying in the present state of architecture, is, in my opinion, to encourage the continuance of that sycantiousness and unskillfulness which the late Mr. Bartholomew so deeply deplores in his essay on the "Decline of Excellence in Architecture." Yet I am surprised to find even in that generally able work, he remarks that the Romans, Grecians, and Freemasons, would have "no more reasonably adopted things on the score of antiquity, than the modern mechanician would under a pretence of keeping to primitive purity, refuse to adopt the improvements in steam-engines by James Watt." Will this analogy hold good? There never has been a decline in this branch of practical science since the time of James Watt. On the contrary, improvements have been increasing rapidly, and probably there never will be a decline. Supposing, however, that such should be the case at some future time, would not the surest way to amend be, to place before the student the ancient steam-engine invented by that great man, and afterwards let him study progressively down to the last improvement? Such a study as this would make him master of the subject (scientifically) more